The Jacobs Institute
Programs & Services

jacobsinstitute.com
“Advanced training at the Jacobs Institute helps show the way to safer and more effective patient care.”
- LN Hopkins, MD, FACS
  Founder & Chief Scientific Officer

The Jacobs Institute, with physician expertise and state-of-the-art facilities, invites you to make Buffalo your training and clinical immersion destination.

The Jacobs Institute (JI) is tailored to the educational needs of the medical community and the medical device industry. It offers single and multi-day training experiences for both physicians and industry staff customized to the specific client’s learning objectives. Our commitment is to provide a comprehensive and seamless training experience for all your company’s clinical requirements.

The JI provides industry with access to leading neurovascular, interventional cardiology, electrophysiology, peripheral vascular, and vascular surgeons and boasts the latest hands-on learning tools. The JI offers advanced endovascular simulation capabilities along with a fully featured BioSkills lab for tissue management, a flexible array of meeting environments, and a comprehensive audio-video system for live case viewing and broadcasting. Seasoned experts in biodesign work with your product engineers to facilitate clinical needs identification.

We can also provide industry engineers and executives with coaching in a proven biodesign model to facilitate medical device innovation and development.

“Industry is seeing that WNY is the place to go to advance innovation in the medical device space.”
- Bill Maggio, CEO

PROGRAMS & SERVICES

The JI offers a comprehensive array of single and multi-day courses for industry staff, engineers, and physicians alike.

We can host cadaveric, animal-based, and operating room experiences, as well as clinical immersion programs. All courses can be augmented with first-class medical simulation.

Physician-to-Physician
Accommodates up to thirty participants

One- to two-day advanced physician training provides participants with opportunities for:
- Endovascular simulation
- Cadaveric specimens
- Animate models
- Vivarium access
- Live surgical observation

Clinical Immersion Program (CIP)
Three-day and five-day programs are available. All programs accommodate up to eight participants.

The multi-day, fully customizable Clinical Immersion Program is aimed at industry engineers, sales representatives, and executives. All programs can be customized to suit employee backgrounds (education, familiarity with vascular medicine, employer development plan), field of industry, and focus area.

Each program can be tailored to industry training objectives, including but not limited to:
- Clinical Immersion: direct experience in the clinical environment in which medical devices are used
- Clinical Understanding: improved understanding of vascular diseases and treatment decisions
- Team Building: common experiences away from the office in a clinical setting
- Employee Retention: more immediate understanding of the impact of medical devices on patient outcomes
- Hands-On Learning: additional familiarity with the performance of medical devices inside the body

Our Training Center accomplishes the above by providing:
- Multi-disciplinary physician lectures and roundtables
- In-person procedural observation for small groups
- Internal broadcasting between clinical procedural areas and the JI Board Room and Training Center
- Hands-on simulation activities
Clinical Needs Identification Program (CNIP)

Three-day, five-day, and two-week programs are available. The course accommodates up to 8 participants.

The objective of the program is to guide the participant teams through the clinical needs identification stage of the biodesign process so they emerge at the end of the week with clear, validated needs statements.

The Clinical Needs Identification Program, customizable in terms of length, combines clinical immersion and clinical feedback, roundtable discussions, and educational sessions. Attendees will interface with industry and Jacobs Institute leadership and engineers, as well as a select group of medical staff in the desired medical specialty. Experienced Jacobs Institute-affiliated coaches will work alongside the industry teams to provide guidance and redirection when necessary.

The program includes:
- Physician-led didactic sessions
- Team coaching activities
- Access to neurosurgeons, cardiologists & vascular specialists
- Access to JI medical device engineers

Product Development Services

The JI offers turnkey product develop solutions in areas such as:
- Pre-clinical device testing (cadaveric, simulation, 3D printed patient-specific customizable models and animate models)
- Preliminary user needs and requirement development and verification
- Computational research, design, and development
- Failure Mode Effects Analysis (DFMEA, PFMEA, UFMEA)

EQUIPMENT & CAPABILITIES

Jacobs Institute Training Center
- Standard lab equipment provided, including lead and all personal protective equipment (PPE)
- Two Toshiba SXT-2000A C-Arms
- Licensed C-Arm technicians
- HD video projection
- Multi-point HD videoconferencing
- Eight micro surgical training stations

Advanced Patient-Specific, 3D Printed Vascular Models
- Hands-on training
- Product testing
- Research & development

Endovascular Simulation Lab
- Compass (SimSuite Medical)
- VIST-LAB (Mentice)

Executive Board Room – seats 18 people
- Remote HD video and audio transmission to any location
- Multi-screen video wall for broadcast and videoconferencing
- Two SMART Boards
- Sliding glass panels that are marker-friendly for collaboration & brainstorming
- Full audio, video, and lighting control
- Convenient space for your catering needs
- WiFi enabled

Corporate Partners Center with Small Board Room – seats 12 people
- Four private adjoining offices for visiting companies and guests
- SMART Board and Cisco HD camera for videoconferencing
- WiFi enabled

And Access To:

University at Buffalo Toshiba Stroke & Vascular Research Center
- 3D printed vascular flow models
- Vivarium

Kaleida Health Gates Vascular Institute
- 15 catheterization labs connected to Jacobs Institute’s AV system
- 5 operating rooms and 2 hybrid operating rooms

UB Molecular & Translational Imaging Center
- MRI
- 64 slice CT scanner
- Bruker 9.4 Tesla Microspec MR Imager
- Toshiba Vantage Titan 3 Tesla MR Imager
- GE Discovery PET CT 690

Other Amenities:
- On-site AV and technical support
- Internal broadcast between clinical procedural areas and the JI Board Room and Training Center
- Complete concierge service for lodging, meals, and transportation
- Locker room and shower facilities
- Faculty/attendee coffee bar & café perfect for catered lunches and collaboration
"The hands-on experience today was incredible. It directly affects how I'll do my job when I walk through the door on Monday."

"The topics for the lectures were spot-on for what I believe we needed at this point in our training, and having the instant physician feedback was exceptional to give us an unbiased opinion of competitor products and techniques."

"Being able to physically touch products in a lab setting. That shed light on so many aspects of my training and was incredibly beneficial in furthering my understanding of implant procedure."

"It was invaluable interacting with physicians while they are in their element performing surgery ... they candidly answered our questions about treatment choices and device selection."

"While working with the Jacobs Institute team, I found it extremely easy to schedule meetings, contact team members and even ship packages. They provided exceptional customer service with attention to detail and professionalism."
About the Jacobs Institute

The Jacobs Institute mission is to create the next generation of medical technology to treat vascular disease in Western New York and beyond. The institute was named in memory of the late Lawrence D. Jacobs, MD. Collaborations are realized through easy interaction of clinicians, researchers, industry, and entrepreneurs.

Located in the heart of the Buffalo Niagara Medical Campus, the Jacobs Institute uniquely sits between University at Buffalo's Clinical and Translational Research Center and Kaleida Health's Gates Vascular Institute to inspire collaboration among these partners and the medical device industry. At the institute, we:

- Advance physician, engineer, and industry sales staff training through clinical education programs incorporating physician expertise
- Provide a behind-the-scenes understanding of how medical devices are used by physicians and how device safety and efficacy can be improved
- Develop the next generation of medical technology in global vascular devices in our i2R, or Idea to Reality Center

Our goal is to spark medical technology innovation for vascular disease and to improve patient care in our community and around the world.